IN THE CLAIMS:

1. (Original) A method for patterning one or more features in a semiconductor device, the method comprising the step of reducing at least one critical dimension of the one or more features during etching of an antireflective material.

2. (Original) The method of claim 1, wherein etching of the antireflective material is accompanied by plasma polymer deposition.

3. (Original) The method of claim 1, wherein the antireflective material comprises one or more inorganic moieties.

4. (Original) The method of claim 1, wherein the antireflective material has the structural formula M:carbon:hydrogen:X, wherein M comprises a metal and X comprises an inorganic element.

5. (Original) The method of claim 4, wherein M comprises a metal selected from the group consisting of silicon, titanium, germanium, iron, boron, tin and combinations comprising at least one of the foregoing metals.

6. (Original) The method of claim 4, wherein X comprises an inorganic element selected from the group consisting of oxygen, hydrogen, nitrogen and combinations comprising at least one of the foregoing inorganic elements.

7. (Original) The method of claim 1, wherein the antireflective material has the structural formula silicon:carbon:hydrogen:oxygen.

8. (Original) The method of claim 1, wherein the antireflective material comprises a tunable etch resistant antireflective coating.

9. (Original) The method of claim 1, wherein the antireflective material is deposited on a substrate using spin on processing.

10. (Original) The method of claim 1, wherein the antireflective material is deposited on a substrate using plasma enhanced chemical vapor deposition.

11. (Original) The method of claim 3, wherein an amount of the one or more inorganic moieties is altered to attain desired reduced critical dimensions for the one or more features.

12. (Original) The method of claim 2, wherein the polymer deposition comprises deposition of one or more polymer layers.

13. (Original) The method of claim 1, wherein each of the one or more features comprises a feature selected from the group consisting of contact holes, via patterns, lines, spaces, ovals and combinations comprising at least one of the foregoing features.

14. (Original) The method of claim 1, wherein the critical dimensions of any given one of the one or more features is reduced by up to about 50 nanometers.

15. (Original) The method of claim 1, wherein the critical dimensions of any given one of the one or more features is reduced by up to about 80 nanometers.

16. (Original) The method of claim 1, wherein the antireflective material is etched using a plasma etch comprising:

at least one fluorocarbon gas;

argon gas;

oxygen gas; and

nitrogen gas.

17. (Original) The method of claim 16, wherein an amount of one or more of the fluorocarbon gas, the argon gas, the oxygen gas and the nitrogen gas is altered to attain desired reduced critical dimensions for the one or more features.

18. (Currently amended) The method of claim 2, wherein the polymer deposition comprises deposition of one or more polymer layers having a thickness of from about ten nanometers to about 500 nanometers.

19. (Original) The method of claim 1, further comprising the step of forming a radiation sensitive imaging layer on the antireflective material, the radiation sensitive imaging layer being compositionally different from the antireflective material.

20. (Original) The method of claim 19, wherein the radiation sensitive imaging layer comprises one or more organic moieties.

21. (Original) The method of claim 1, further comprising the steps of:

depositing the antireflective material on a substrate; and

reducing at least one critical dimension of the one or more features during etching of the substrate.

22. (Original) The method of claim 1, wherein the antireflective material is deposited on a substrate comprising a dielectric material.

23. (Original) The method of claim 1, wherein the antireflective material is deposited on a substrate comprising a low-k dielectric material.

24. (Original) The method of claim 1, wherein the antireflective material is deposited on a substrate comprising an oxide material selected from the group consisting of fluorosilicate glass, borosilicate glass, borophosphorosilicate glass and combinations comprising at least one of the foregoing oxide materials.

25. (Canceled)

26. (Canceled)

27. (Original) A method for patterning one or more features in a semiconductor device, the method comprising the step of reducing one or more dimensions of the one or more features during etching of an antireflective material, wherein the one or more dimensions comprise the characteristic dimensions of the one or more features attained during patterning.

28. (New) The method of claim 4, wherein an amount of the inorganic element is altered to attain desired reduced critical dimensions for the one or more features.